

Application No. 09/785,559

Filed: February 16, 2001

TC Art Unit: 1744

Confirmation No.: 3534

Amendment to the Claims

Please cancel pending claim 59.

61. (new) An apparatus for conducting electro-physiological measurements on cells comprising a measuring head provided with at least one measuring electrode for impaling said cells, with at least one perfusion conduit made as a perfusion inlet having a first end opening, wherein said at least one measuring electrode is integrated into a support, said at least one perfusion inlet being arranged essentially parallel with said at least one measuring electrode, and said first end opening being located above a lower end of said at least one measuring electrode, said apparatus further comprising a receptacle for said cells wherein said measuring head is arranged on an actuator, said actuator being adapted to be displaced along a coordinate system above said receptacle, wherein said actuator carries a plurality of measuring heads, wherein said measuring heads are adapted to be displaced individually relative to said actuator along said axis z directed towards said cell.